

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
28 July 2005 (28.07.2005)

PCT

(10) International Publication Number
WO 2005/068007 A2

(51) International Patent Classification⁷: **A61M 25/10**
25/00

(74) Agent: **PLOUGMANN & VINGTOFT a/s**; Sundkrogs-
gade 9, P.O. Box 831, DK-2100 Copenhagen Ø (DK).

(21) International Application Number:
PCT/DK2005/000020

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(22) International Filing Date: 14 January 2005 (14.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PA 2004 00054 16 January 2004 (16.01.2004) DK

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for all designated States except US):
RIGSHOSPITALET [DK/DK]; Blegdamsvej 9, DK-2100
Copenhagen Ø (DK).

(71) Applicant (for US only): **KELBÆK, Henning** [DK/DK];
Kildegårdsvej 16B, 1. tv., DK-2900 Hellerup (DK).

(72) Inventors; and

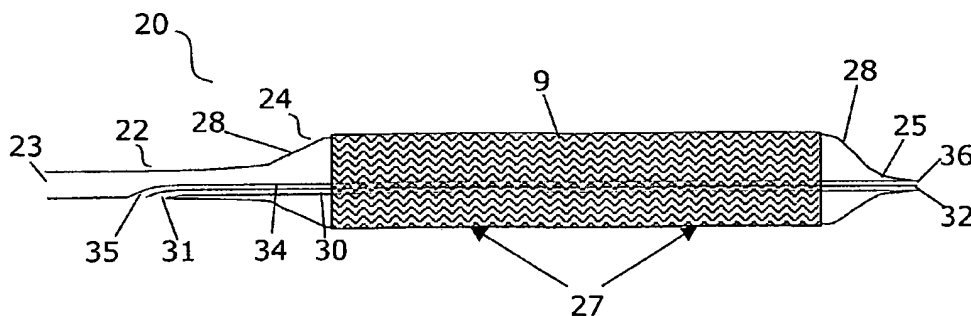
(75) Inventors/Applicants (for US only): **JØRGENSEN,**
Erik [SE/DK]; Nyhavn 16, 2., DK-1051 Copenhagen
K (DK). **HELQVIST, Steffen** [DK/DK]; Ullasvej 15,
DK-2880 Bagsværd (DK).

Published:

— without international search report and to be republished
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: **DOUBLE-WIRE NON-TRAPPING ANGIOPLASTY CATHETER**



(57) Abstract: The invention provides a catheter, which can be introduced into the coronary arteries over two or more wires. The catheter can be used for coronary, as well as for peripheral angioplasty, in particular near bifurcations. The catheter is of the rapid-exchange or over-the-wire type. The catheter allows procedures, in which two or more wires are introduced into the different branches of a bifurcation prior to positioning a stent proximal to the bifurcation. The wires are fully functional through the interior passage of the stent after its positioning. The procedure allows angioplasty of the distal vessels of the bifurcation without training or repositioning of the wires. The catheter thus avoids the problem of wire trapping between the stent and the artery wall. According to a method of the invention, a first stents is first positioned in the principal vessel and further conventional stents are positioned in the branches of the bifurcation with their proximal ends parts residing inside the first stent in the principal vessel.

WO 2005/068007 A2